

**BOARD OF COUNTY COMMISSIONERS  
AGENDA ITEM SUMMARY**

MEETING DATE: 8/16/06

DIVISION: COUNTY ADMINISTRATOR

BULK ITEM: YES

DEPARTMENT: AIRPORTS

STAFF CONTACT PERSON: Peter Horton

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AGENDA ITEM WORDING: Approval of and authorization for the Mayor to execute a contract with THC, Inc. for the Noise Insulation Program, Phase 5 Construction Services, for the Key West International Airport.

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ITEM BACKGROUND: This project will be funded 95% by the Federal Aviation Administration, and 5% by Passenger Facility Charge Revenue.

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PREVIOUS RELEVANT BOCC ACTION: Approval to submit PFC Application # 9, to the Federal Aviation Administration, August 18, 2004.

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CONTRACT/AGREEMENT CHANGES: New contract

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STAFF RECOMMENDATION: Approval

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TOTAL COST: \$468,820.00

BUDGETED: Yes

COST TO AIRPORT: None

SOURCE OF FUNDS: FAA, PFC Revenue

COST TO PFC: \$23,441.00

COST TO COUNTY: None

REVENUE PRODUCING: No

AMOUNT PER MONTH /YEAR:

APPROVED BY: County Attorney X

OMB/Purchasing X

Risk Management X

AIRPORT DIRECTOR APPROVAL \_\_\_\_\_



Peter J. Horton

DOCUMENTATION: Included X

Not Required

AGENDA ITEM # \_\_\_\_\_

DISPOSITION: \_\_\_\_\_

/bev  
AO

# MONROE COUNTY BOARD OF COUNTY COMMISSIONERS

## CONTRACT SUMMARY

Contract #

Contract with: THC, Inc.

Effective Date: Execution

Expiration Date: 500 days

Contract Purpose/Description: Implementation of Noise Insulation Program, Phase 5 Construction Services

Contract Manager: Bevette Moore  
(name)

# 5195  
(Ext.)

Airports - Stop # 5  
(Department/ Stop)

for BOCC meeting on: 8/16/06

Agenda Deadline: 8/1/06

## CONTRACT COSTS

Total Dollar Value of Contract: 468,820.00

Current Year Portion: ~30,000.00

Budgeted? Yes

Account Codes: Pending FAA Grant 037-29

Grant: FAA

County Match: PFC Revenue

## ADDITIONAL COSTS

Estimated Ongoing Costs: n/a  
(not included in dollar value above)

For: .  
(eg. maintenance, utilities, janitorial, salaries, etc.)

## CONTRACT REVIEW

	Date In	Changes Needed Yes No	Reviewer	Date Out
Airports Director	<u>7/26/06</u>	( ) <input checked="" type="checkbox"/>	<u>Peter Horton</u> Peter Horton	<u>7/26/06</u>
Risk Management	<u>7/12/06</u>	( ) ( )	<u>Maia Smith</u> for Risk Management	<u>7/12/06</u>
O.M.B./Purchasing	<u>1/1/</u>	( ) ( )	<u>Salvatore Spade</u> for OMB	<u>7/29/06</u>
County Attorney	<u>1/1/</u>	( ) ( )	<u>Pedro Mercado</u> County Attorney	<u>6/1/06</u>

Comments: \_\_\_\_\_

\_\_\_\_\_  
\_\_\_\_\_  
\_\_\_\_\_

# Memo

To: Board of County Commissioners  
From: Peter Horton, Director of Airports  
Date: 8/1/06  
Re: Agenda Item - THC

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This item requests approval of a contract with THC, for the Noise Insulation Program, Phase 5 Construction Services, for the Key West International Airport.

The project will be funded 95% by the Federal Aviation Administration , and 5% by PFC Revenue.

The Commission granted approval to submit PFC Application # 9, to the FAA, 8/18/04. This project is noted in this PFC Application.

Thank you

/bev

**PROFESSIONAL / SERVICE ORDER**

**FOR**

**MONROE COUNTY**

To: THC, Inc. Professional Service Order No. 5

Re: PSO Agreement, Dated 10-15-03 Resolution No. \_\_\_\_\_

Project Name: Implementation of Noise Insulation Program – (Phase 5 Construction Services)

Description of Services:

(See attached Scope of Services)

Multiple of Direct Salaries \_\_\_\_\_

Lump Sum X Reimbursable Expense \_\_\_\_\_

Days to Complete 500 Fee this Service Order \$468,820.00

Payment for Services shall be in their entirety as per PSO.

**Prepared by:**

Joe & Co //

Date: 5-31-06

**Recommended by:**

[Signature]

Date: 6-27-06

**Accepted by:**

Joe & Co //

Date: 5-31-06

**Approved by:**

\_\_\_\_\_

Date: \_\_\_\_\_

**MONROE COUNTY ATTORNEY**

**APPROVED AS TO FORM**

[Signature]  
**PEDRO J. MERCADO**  
**ASSISTANT COUNTY ATTORNEY**

# **PHASE 5 CONSTRUCTION MANAGEMENT SCOPE OF SERVICES IMPLEMENTATION OF NOISE INSULATION PROGRAM KEY WEST INTERNATIONAL AIRPORT**

This Scope of Services will describe tasks necessary to implement the Noise Insulation Program for Phase 5 Construction Services. The services will include preliminary construction tasks through project close-out. As of this writing, this phase will require the construction management of forty-nine (49) buildings, comprised of sixty-two (62) residential dwelling units, to be sound insulated. This is because there are multiple unit buildings in this phase (duplex, triplex, quadraplex). Each unit has to be addressed as a separate house due to the mechanical systems being separate for multiple unit buildings. In the past there have been scattered units that have fallen out of the project for various reasons. While this does impact the design phase costs, due to the need for less design packages, it only reduces the scope for the construction management phase if it results in a lower amount of construction sub-periods. Whereas Phase 4 had five (5) construction sub-periods, due to the increased number of residential units, this phase is forecast to have six (6) construction sub-periods, thereby requiring additional time for construction management services.

This scope differs from Phase 4 Construction Management in three areas:

- 1) Due to the increase in units from 55 to 62, we have added another construction sub-period (Total of 6). This increases the time allotted for program management, homeowner liaison services, on-site construction inspections and oversight. It includes 1,624 hours of full-time residency for the MDA Construction Manager in Key West.
- 2) We have added approximately 358 hours to the budget for construction phase oversight from the MDA Construction Services Director, and
- 3) We have increased the time allotted to THC personnel due to the increase in construction sub-periods and the administrative requirements on previous CM phases.

The THC Director of Sound Insulation Programs is the ultimate party of responsible for THC, Inc., and will provide program management consultation throughout the 13 month period. We have added time to the schedule due to the delays we have seen in the past as a result of inclement weather. The Consultant Team will be directed on a daily basis by a THC Project Manager who will report directly to the Key West International Airport's Noise Program Coordinator and the THC Director of Sound Insulation Programs. It is anticipated that the actual construction period will consist of 11 months within the 13 month project timetable.

The Consultant Team is composed of the following disciplines. Their billable rates are shown in parenthesis:

- **THC, Inc.** - The Program Manager, THC, Inc. (THC) will provide overall program management services. THC will provide support to the Airport Noise Program Coordinator. THC will provide database services and project scheduling, along with interaction with all participating property owners and tenants. The Director of Sound Insulation Programs (\$185.00) will have overall responsibility for the project and provide master planning, document review and development, scheduling and overall program management throughout the project. THC will also assign a Project Manager (\$107.00) to the project for the entire construction phase, which will travel back and forth from Atlanta to Key West on a periodic basis. THC will also utilize the services of an Assistant to the Project Manager (\$73.00) for administrative work from the Atlanta headquarters office.
- **Miller-Dunwiddie Architects** - The Construction Management firm (Miller Dunwiddie Architects) (MDA) will provide a full-time Construction Manager (\$95.00) on-site for the 11 month construction period. MDA will also utilize the services of the Principal Architect (\$175.00), and considerable project oversight from the Construction Services Director (\$130.00).
- **The Sun Group** - The Sun Group will provide architectural assistance during the construction management process. When required by either THC or MDA, The Sun Group's responsibilities will include providing design clarification, assisting in the evaluation of unforeseen site issues, providing field clarifications, reviewing shop drawings and providing change order review. In addition, The Sun Group will provide clarification of the construction specification language to the Program Manager and Construction Contractor. The Sun Group will utilize the services of the Project Architect (\$130.00) and a Professional Engineer (\$100.00).
- **Landrum & Brown** - The Acoustical Engineer, Landrum & Brown (L&B) will provide "post" modification noise testing in homes previously "pre" tested during the design phase (approximately eight (8) homes). L&B will utilize a Senior Consultant (\$210.00), two Consultants (both rates are \$140.00) and an Administrative Assistant (\$65.00) on this project.

## **Travel**

This section explains the travel budgeting for the THC Consultant Team. Each task has a travel section following the task description where appropriate. If there is no travel section following a task description, then there is no travel planned for this task. The following information explains the number of trips planned and the allotted days, nights and budgeted costs for each member of the various companies represented on the consultant team.

THC has budgeted four (4) trips for the Project Manager and two (2) trips for the Director of Sound Insulation Programs, for a total of six (6) trips. These trips include four (4) nights, five (5) day stays for the Project Manager, and two (2) nights, three (3)

day stays for the Director of Sound Insulation Programs, each trip. Where other tasks require trips for the Project Manager, they will be absorbed into the four (4) trips budgeted so that more than one task can be addressed by the Project Manager during the same trip. All trips budgeted for THC are scheduled as non-stop, round trip flights from Atlanta, GA to Key West. Airfare for round trip service from Atlanta to Key West is budgeted at \$750.00 per flight. Hotel accommodations are budgeted at \$250.00 per night. Auto rental is budgeted at \$50.00 per day. Per diem is budgeted at \$40.00 per day.

MDA will place the Construction Manager on-site for the duration of the construction period, which is forecast to be 1,624 hours, or eleven (11) months. MDA has budgeted one flight per month for this employee to return home to Minneapolis (11 flights).

MDA has budgeted thirteen (13) trips for the Construction Manager and four (4) trips for the Construction Services Director, for a total of seventeen (17) trips. Two (2) trips for the Construction Manager are outside of the time period of the residency for daily construction administration where the Construction Manager is living on site in Key West. One of these trips is scheduled for a six (6) night, seven (7) day stay at a hotel (\$250.00 per night) for measurement visits. That one trip also includes a rental car at \$50.00 per day, since this is prior to the Construction Manager's on-site residency in Key West and a \$40.00 per diem for the three (3) days. The other trip is budgeted for two (2) nights and three (3) days to be used as necessary. There are eleven (11) trips budgeted for the Construction Manager during the 11 month construction period residency. There are no trips budgeted for the Principal Architect for MDA.

The four (4) trips scheduled for the MDA Construction Services Director are budgeted for three (3) nights, four (4) day stays per trip. All trips budgeted for MDA are scheduled from Minneapolis, MN to Key West and budgeted at \$1,200.00 per flight. Hotel accommodations are budgeted at \$250.00 per night. Auto rental is budgeted at \$50.00 per day. Per diem is budgeted at \$40.00 per day.

The Sun Group will support the THC team as a sub-consultant and assist MDA with various tasks such as review of construction shop drawings and product submittals, review of contractor requests for information (RFIs), change order requests, and attending construction progress meetings as necessary. The Sun Group has budgeted for two (2) trips to Key West. These trips are forecast to be two (2) night, three (3) day trips. All trips budgeted for The Sun Group are scheduled from West Palm Beach, FL to Key West and budgeted at \$705.00 per flight. Hotel accommodations are budgeted at \$250.00 per night. Auto rental is budgeted at \$50.00 per day. Per diem is budgeted at \$40.00 per day. All project related work from The Sun Group will be performed by the Project Architect, except for some minor review work to be performed by the Professional Engineer.

The Acoustical Engineer, Landrum & Brown, has budgeted for one (1) trip for two (2) employees (total of two (2) trips) for post modification noise testing in the field. These two employees (Consultant 1 and Consultant 2) will spend two (2) nights and three (3)

days in Key West. All trips budgeted for Landrum & Brown are scheduled from Boston, MA to Key West and budgeted at \$750.00 per flight. Hotel accommodations are budgeted at \$250.00 per night. Auto rental is budgeted at \$80.00 per day (only one vehicle budgeted for both Consultants) due to the L&B employees needing a van to accommodate the noise testing equipment. Per diem is budgeted at \$40.00 per day for each Consultant.

Also included in the expense budget for L&B are expenses associated with their noise testing equipment. These include the fee for use of their noise testing equipment, the LD824, at \$200.00, and the shipping expenses associated with transporting this equipment at \$280.00.

#### **Travel Summary for the Project**

<b>Company</b>	<b>Position</b>	<b>No. of Trips</b>
THC	Director of Sound Insulation Programs	2
THC	Program Manager	4
MDA	Construction Services Director	4
MDA	Construction Manager	13
Sun Group	Project Architect	2
L&B	Consultant 1	1
L&B	Consultant 2	1

#### **Other Expenses**

The MDA expense budget also includes an amount of \$650.00 per month for various office expenses during the 11 month construction period. The MDA expense budget also includes a housing expense of \$3,000.00 per month for the Construction Manager during the 11 month construction period. There are no per diem charges or rental car charges budgeted for the Construction Manager during the 11 month construction period.

#### **Project Tasks**

There are four (4) tasks associated with the Phase 5 Construction Management project. There are 5 sub-tasks of Task 3. They are:

- 1) Project management
- 2) Conduct Pre-construction tasks and conference
- 3) Construction period management
  - a. Maintain Project Office and Provide Information to the Public
  - b. Conduct Contractor Walk-Through
  - c. Provide Construction Phase Services
  - d. Conduct Final Inspections



- e. Evaluate and Close-out Project
- 4) Conduct post-modification noise test and prepare final report

## **TASK 1 PROJECT MANAGEMENT**

THC will perform general project-related management and coordination with the Airport Noise Program Coordinator. This task includes preparation of monthly invoices and progress reports, FAA coordination as necessary, project management plan updates, sub-consultant coordination and management, and schedule updates. The Project Manager will travel to the project site as necessary for coordination with the participating homeowners, the airport staff, and the various members of the consultant team. The Project Manager will also provide services off-site on a continuing basis. The Project Manager will always be available for interaction as circumstances arise. Since Project Management encompasses the entire project, **100% of the THC employees' hours are included in this task as follows:**

### **Summary of Hours - THC**

<b>Position</b>	<b>Hours</b>	<b>Hourly Rate</b>
Director SIP	140	\$185.00
Project Manager	600	\$107.00
Assistant to Project Manager	340	\$73.00

This task also includes conference calls with the Consultant Team and related documentation. MDA, The Sun Group and L&B will perform general project-related coordination with the THC Project Manager. This includes preparation of monthly invoices and progress reports, FAA coordination as necessary, and schedule updates.

Miller-Dunwiddie (MDA) employees will assist THC in the program management due to their key role in the construction management task. The MDA Principal Architect will have corporate responsibility for MDA on this project. He will utilize the services of the MDA Construction Services Director to oversee MDA performance on this project. The MDA Construction Manager will provide daily construction inspections and a continuous analysis of contractor performance and report directly to the MDA Construction Services Director, and the THC Project Manager. **This task includes 100% of the MDA Principal Architect's hours and 84% of the MDA Construction Services Director's hours.** The summary of hours for this task is as follows:

**Summary of Hours - MDA**

Position	Hours	Hourly Rate
Principal Architect	24	\$175.00
Construction Services Director	302	\$130.00

The MDA Construction Manager will coordinate and direct the contractor's daily on-site performance and direct all change orders and/or changes to the scope of work. The Construction Manager will coordinate change order requests with the Project Architect (The Sun Group) as necessary. This task also includes coordination with the airport, as well as weekly conference calls with the Consultant Team and related documentation. The Construction Manager will perform general project-related coordination with the THC Project Manager. This includes preparation of monthly invoices and progress reports, and schedule updates. **There are no hours shown for the Construction Manager under this task.**

**There are no hours budgeted for L&B or The Sun Group under this task.**

**Travel Summary for this Task**

Company	Position	No. of Trips
THC	Director of Sound Insulation Programs	2
THC	Program Manager	4
MDA	Construction Services Director	3

**TASK 2 CONDUCT PRE-CONSTRUCTION TASKS & CONFERENCE**

Prior to the construction period, the MDA Construction Services Director and Construction Manager, along with the Project Architect from The Sun Group, will conduct pre-construction tasks and document the Pre-Construction Conference. This will require a review of the scope of work and the coordination plan. The Sun Group will make all necessary revisions to the Phase 5 NIP Construction Specifications, including technical specifications, architectural details and shop drawing review. This will also require some time from a Professional Engineer from The Sun Group. The Professional Engineer's time will be provided from the offices of The Sun Group in West Palm Beach, FL, and therefore will not require travel to the project site. The Sun Group and MDA will review all administrative procedures and performance requirements with the contractors. The Project Architect and the Construction Manager will acquaint contractor personnel with the detailed requirements of noise insulation design. **Approximately 7% of the Construction Services Director's hours are included in this task. Approximately 2% of the Construction Manager's hours are included in this task.** The summary of hours for MDA is as follows:

**Summary of Hours - MDA**

Position	Hours	Hourly Rate
Construction Services Director	24	\$130.00
Construction Manager	40	\$95.00

**100% of The Sun Group Professional Engineer hours are included in this task. Approximately 40% of The Sun Group Principal Architect's hours are included in this task.** The summary of hours for The Sun Group is as follows:

**Summary of Hours – SUN GROUP**

Position	Hours	Hourly Rate
Project Architect	80	\$130.00
Professional Engineer	40	\$100.00

The Construction Services Director, the Construction Manager and the Project Architect will all attend the Pre-Construction Conference. The Project Manager and the Director of Sound Insulation Programs will attend if necessary (all travel expenses are provided for THC personnel under Task A). They will also provide various services prior to the beginning of the construction period. The Project Architect will prepare written material and research products for approval and discussion prior to the Pre-Construction Conference. The Project Architect will utilize the services of the Professional Engineer to provide research and expertise relative to the products to be used during this phase as well as their performance on previous phases. The Professional Engineer, along with the Project Architect, will also field questions from various interested contractors following the meeting. This will require approximately one full week of time from the Professional Engineer, and two full weeks of time from the Project Architect. The Pre-Construction Conference will cover the following material:

- Purpose of the project;
- Goals to be achieved;
- Homeowner interaction and sensitivity training;
- Simplified description of noise transmission into buildings;
- Noise insulation treatments;
- Submittal requirements;
- Scheduling and phasing of trades;
- Level of workmanship;
- Coordination requirements;
- Progress payments;
- Requisitions and change orders;
- Final closeout documentation requirements.

**Travel Summary for this Task**

Company	Position	No. of Trips
MDA	Construction Services Director	1
MDA	Construction Manager	1
Sun Group	Project Architect	1

**TASK 3 CONSTRUCTION PERIOD MANAGEMENT**

There are several tasks that take place during the same general period of time and/or simultaneously during the Construction Period. **The balance of the hours for the Construction Services Director (MDA), Construction Manager (MDA) and Project Architect (Sun Group) are budgeted for Task 3. These hours are spread out among the sub-tasks of this section.** The following sub-tasks all fall under Task 3 Construction Period Management.

**3A. MAINTAIN PROJECT OFFICE AND PROVIDE INFORMATION TO THE PUBLIC**

The Consultant's Project Manager (THC), Project Architect (Sun Group) and Construction Manager (MDA) will answer inquiries from and provide information to the public, the media, and the County as appropriate. They will support the Airport Noise Program Coordinator in conducting daily program implementation. The Construction Services Director (MDA) will also provide assistance to the Construction Manager during this task.

As directed by the Airport Noise Program Coordinator, either the Construction Manager (MDA) or the Project Manager (THC) will attend the airport's Ad-Hoc Committee meetings on noise to provide status reports on the progress of the Noise Insulation Program and other related matters during the term of this phase. The Project Manager will attend if in town for project related tasks. They will provide status reports on the progress of the Noise Insulation Program and other related matters. The Construction Manager will also attend project management meetings as necessary in Key West, to coordinate with THC and the Airport Noise Program Coordinator regarding the overall construction management of the project.

**Approximately 2% of the Construction Manager's hours are included in this task.** The summary of hours is as follows:

**Summary of Hours - MDA**

Position	Hours	Hourly Rate
Construction Manager	40	\$95.00

### **3B. CONDUCT CONTRACTOR WALK-THROUGH**

The Construction Manager will conduct the walk-through of the homes. The Construction Manager will work with the THC Project Manager to coordinate these inspections with the homeowners. This walk-through will involve the following:

- **Product Measurements** – The contractor and manufacturer representatives, if present, will measure the window and door openings for ordering and manufacturing the designated products.
- **Review of Installation Details** – The contractor must review the existing condition of the window and door openings.
- **Verification of Homeowner Pre-Work Completion** - The Construction Manager will, along with the Airport Noise Program Coordinator, inspect items listed in the contract documents as Homeowner pre-work for satisfactory resolution. Where necessary, the Construction Manager, along with the Airport Noise Program Coordinator, will address these issues with the Homeowner.
- **Verification of Finishes, Colors and Styles** – The Construction Manager, along with the Airport Noise Program Coordinator, will verify with the Homeowner the product selection styles, colors and finishes, the window grille configuration (if applicable), and the location of the air condensing unit (if applicable).
- **Construction Survey Form** - The Construction Manager, along with the Airport Noise Program Coordinator, will complete the Construction Survey with the Homeowner.

**Approximately 9% of the Construction Services Director's hours are included in this task. Approximately 2% of the Construction Manager's hours are included in this task. The summary of hours for MDA is as follows:**

#### **Summary of Hours - MDA**

<b>Position</b>	<b>Hours</b>	<b>Hourly Rate</b>
Construction Services Director	32	\$180.00
Construction Manager	40	\$95.00

#### **Travel Summary for this Task**

<b>Company</b>	<b>Position</b>	<b>No. of Trips</b>
MDA	Construction Services Director	1

### **3C. PROVIDE CONSTRUCTION PHASE SERVICES**

The Construction Manager will provide construction observation services and conduct daily field inspections to help ensure quality control. The Construction Manager will consult with the Construction Services Director for guidance and assistance throughout this phase. If change orders are necessary, the Construction Manager will secure the

approval of the airport and the FAA prior to approving any major changes to the contract. The Construction Manager will utilize The Sun Group Project Architect to assist in the administration and completion of all necessary change orders, review and approval of shop drawings, and review and approval of materials and products. The Project Architect will travel to the project site for these tasks as needed. The tasks involved in construction administration include the following:

- Review and process all submittals and shop drawings that are required by the Specifications.
- Review materials before they are installed to ensure that they comply with approved submittals.
- Review work covered by shop drawings to ensure that it complies with Contract Documents.
- Conduct daily inspections at each site that is under construction.
- Coordinate with the Contractors to insure all appropriate building permits have been secured.
- Observe work in progress to verify that it meets the requirements and intent of the Contract Documents.
- Attend, conduct, and document weekly construction progress meetings with the contractors and subcontractors.
- Notify the General Contractor of any part of the work in progress that does not conform to approved submittals, shop drawings, or Contract Documents.
- Consider and evaluate the Contractor's suggestions for modifications to the Contract Documents.
- Maintain files and records of all pertinent documents including submittals, shop drawings, addenda, minutes of meetings and reports.
- Review applications for payment to ensure that they agree with the work actually done and materials actually received.
- Prepare punch lists at the appropriate time for each unit, distribute the lists to the General Contractor for execution, verify that punch list items are complete, and then certify the General Contractor's final invoice for payment.

The Construction Manager will write daily reports for approximately 40 to 41 weeks to perform the tasks described above. It is planned that this period of time will be adequate to complete construction activities with a maximum of 10 houses per each sub-construction period for the duration of Phase 5. There are 62 units at the time of this writing. We are anticipating 6 sub-periods of 10 units each. We believe that it is reasonable to assume that at least two units will drop out. If they do not, they will be absorbed into the six sub-periods, making two of the sub-periods 11 dwelling units.

**Much of the Construction Services Director's time will be spent on this task conferring with the Construction Manager on various issues; however the hours for the Construction Services Director are shown under Task 1 Project Management instead of here. Approximately 90% of the Construction Manager's hours are included in this task. The summary of hours for MDA is as follows:**

**Summary of Hours - MDA**

Position	Hours	Hourly Rate
Construction Manager	1624	\$95.00

**Approximately 60% of The Sun Group Principal Architect's hours are included in this task.** The summary of hours for The Sun Group is as follows:

**Summary of Hours – SUN GROUP**

Position	Hours	Hourly Rate
Project Architect	120	\$130.00

**Travel Summary for this Task**

Company	Position	No. of Trips
MDA	Construction Manager	11
Sun Group	Project Architect	1

**3D. CONDUCT FINAL INSPECTIONS**

Once the outstanding punch list items for a particular house are completed, the Construction Manager will conduct a final inspection of that house. The Construction Manager will verify that all items identified on the punch list have been addressed, that all work has been performed in accordance with the contract plans and specifications, and that the work meets project standards for workmanship and quality.

The Construction Manager and the THC Project Manager will schedule and perform the final inspections with the Homeowners.

**Approximately 2% of the Construction Manager's hours are included in this task.** The summary of hours for MDA is as follows:

**Summary of Hours - MDA**

Position	Hours	Hourly Rate
Construction Manager	40	\$95.00

### **3E. EVALUATE AND CLOSE-OUT PROJECT**

The Construction Manager will prepare a full technical assessment of performance and achievements, including the following:

- The adequacy of technical specifications.
- Project revisions required, if necessary, to the technical specifications in order to achieve the Project objectives.
- An evaluation of the predicted versus the actual costs for modifications.
- Contract schedule compliance.
- Full cost accounting including Bid cost and Change Order Request evaluation.

The Project Architect will assist the construction Manager in the close-out of the project.

**Approximately 2% of the Construction Manager's hours are included in this task.**  
The summary of hours for MDA is as follows:

#### **Summary of Hours - MDA**

<b>Position</b>	<b>Hours</b>	<b>Hourly Rate</b>
Construction Manager	40	\$95.00

### **TASK 4 CONDUCT POST - MODIFICATION NOISE TEST AND PREPARE FINAL REPORT**

The Acoustical Engineer will conduct post-modification noise audits of the homes that were pre-tested during the design phase (approximately eight (8) homes). Pre-modification data will be compared with post-modification measurements to document the achieved increase in noise reduction, and as a check on quality control. L&B will utilize the services of two consultants to perform this task on-site. The Senior Consultant for L&B will analyze the information and document the results in a final report. He will utilize the services of an Administrative Assistant to complete the report. **All L&B employees' hours are included in this task. This includes the Senior Consultant, Consultant 1, Consultant 2 and the Administrative Assistant.**

#### **Summary of Hours - L&B**

<b>Position</b>	<b>Hours</b>	<b>Hourly Rate</b>
Senior Consultant	4	\$205.00
Consultant 1	58	\$140.00
Consultant 2	32	\$140.00
Administrative Assistant	2	\$65.00



The noise level reduction (NLR) measurements essentially consist of placing a loudspeaker inside each of the rooms that will be measured. The electrical signal of a pink noise source is fed through the amplification/loudspeaker system and is filtered to simulate aircraft noise. The consultants will measure the average interior sound level within the room and the sound level directly outside each exterior element (i.e., doors, windows, and walls). An overall NLR will be mathematically computed based on the measured test data and the acoustical conditions of each room.

**Travel Summary for this Task**

<b>Company</b>	<b>Position</b>	<b>No. of Trips</b>
L&B	Consultant 1	1
L&B	Consultant 2	1

**KWIA Phase 5 Construction Management Budget**

Task	Task Description	Lump-Sum Amount	S. Vacchi DSIP	K. Dillard PM	H. Faubert APM	C. Lau PA	B. Newlin CSD	K. Lippert CM	R. Sun PA	TBD P.E.	A. Hass Senior Con.	E. Seavey Consultant 1	TBD Consultant 2	TBD Admin Assist.	TOTALS
			140	600	340	24	302								
			\$ 185.00	\$ 107.00	\$ 73.00	\$ 175.00	\$ 130.00	\$ 95.00	\$ 130.00	\$ 100.00	\$ 205.00	\$ 140.00	\$ 140.00	\$ 65.00	
1	Project Management	\$ 158,380.00	\$25,900.00	\$64,200.00	\$ 24,820.00	\$4,200.00	\$39,280.00	\$ -							\$ 158,380.00
2	Conduct Pre-construction Tasks and Conference	\$ 21,320.00					24	40	80	40					\$ 21,320.00
							\$ 3,120.00	\$ 3,800.00	\$10,400.00	\$ 4,000.00					\$ -
3	Construction Period Management														\$ -
3a	Maintain Project Office and Provide Information to the Public	\$ 3,800.00						40							\$ 3,800.00
								\$ -	\$ 3,800.00						\$ -
3b	Conduct Contractor Walk-through	\$ 7,960.00					32	40							\$ 7,960.00
							\$ 4,160.00	\$ 3,800.00	\$ -						\$ -
3c	Provide Construction Phase Services	\$ 169,880.00						1624	120						\$ 169,880.00
								\$ -	\$154,280.00	\$15,800.00					\$ -
3d	Conduct Final Inspections	\$ 3,800.00						40							\$ 3,800.00
								\$ -	\$ 3,800.00						\$ -
3e	Evaluate and Close-out Project	\$ 3,800.00						40							\$ 3,800.00
								\$ -	\$ 3,800.00	\$ -					\$ -
	TOTAL TASK 3	\$ 189,240.00				\$ -	\$ 4,160.00	\$168,480.00	\$15,600.00	\$ -					\$ 189,240.00
4	Conduct Post-modification Noise Test and Prepare Final Report	\$ 13,550.00									4	56	32	2	\$ 13,550.00
											\$ 820.00	\$ 8,120.00	\$ 4,480.00	\$ 130.00	\$ -
	Reimbursable Expenses	\$ 86,330.00	\$25,900.00	\$64,200.00	\$ 24,820.00	\$4,200.00	\$46,540.00	\$173,280.00	\$28,000.00	\$ 4,000.00	\$ 820.00	\$ 8,120.00	\$ 4,480.00	\$ 130.00	\$ 382,490.00
					\$ 11,840.00			\$ 67,890.00		\$ 3,140.00				\$ 3,480.00	\$ 86,330.00
					\$126,780.00			\$291,910.00		\$33,140.00				\$ 17,010.00	\$ 468,820.00
	TOTAL PSO #1 BUDGET	\$ 468,820.00													

**KWIA Phase 5 CM  
Reimbursable Expenses**

THC, Inc.								
Travel	Trips	Nights	Days	Flight	Hotel	Auto	Per Diem	TOTAL COST
Dir SIP	2	2	3	\$ 750.00	\$ 250.00	\$ 50.00	\$ 40.00	\$ 3,040.00
PM	4	4	5	\$ 750.00	\$ 250.00	\$ 50.00	\$ 40.00	\$ 8,800.00
<b>TOTAL</b>								<b>\$ 11,840.00</b>

MDA									
Travel		Trips	Nights	Days	Flight	Hotel	Auto	Per Diem	TOTAL COST
Construction Services Director		4	3	4	\$ 1,200.00	\$ 250.00	\$ 50.00	\$ 40.00	\$ 9,240.00
Construction Manager		11	0	0	\$ 1,200.00	\$ 250.00	\$ 50.00	\$ 40.00	\$ 13,200.00
Measurement Visit		1	6	7	\$ 1,200.00	\$ 250.00	\$ 50.00	\$ 40.00	\$ 3,330.00
Additional Trip		1	2	3	\$ 1,200.00	\$ 250.00	\$ 50.00	\$ 40.00	\$ 1,970.00
Housing	Months	11						\$ 3,000.00	\$ 33,000.00
Office Expenses	Months	11						\$ 650.00	\$ 7,150.00
<b>TOTAL</b>									<b>\$ 67,890.00</b>

SUN GROUP								
Travel	Trips	Nights	Days	Hotel	Flight	Auto	Per Diem	TOTAL COST
Project Architect	2	2	3	\$ 250.00	\$ 705.00	\$ 40.00	\$ 40.00	\$ 2,890.00
Postage & Copying								\$ 250.00
<b>TOTAL</b>								<b>\$ 3,140.00</b>

L&B								
Travel	Trips	Nights	Days	Flight	Hotel	Auto	Per Diem	TOTAL COST
Consultant 1	1	2	3	\$ 750.00	\$ 250.00	\$ 80.00	\$ 40.00	\$ 1,610.00
Consultant 2	1	2	3	\$ 750.00	\$ 250.00	\$ -	\$ 40.00	\$ 1,370.00
SIL System								\$ 200.00
Shipping								\$ 280.00
<b>TOTAL</b>								<b>\$ 3,460.00</b>

<b>TOTAL REIMBURSABLE EXPENSES</b>	<b>\$ 86,330.00</b>							
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## INDEPENDENT KOST ESTIMATES

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P. O. Box 46681  
St. Pete Beach  
Florida 33741

(727) 367-2910

June 3, 2006

Ms. Bevette Moore  
Business Coordinator  
Airports Business Office  
3491 S. Roosevelt Boulevard  
Key West, Florida 33040

Subject: Key West International Airport  
Consultant Fee Assessment

Dear Ms. Moore:

Per our agreement, attached is my assessment of the consultant fees for the proposed AIP Project (Phase 5 Construction Management Services, Implementation of Noise Insulation Program) at Key West International Airport. This estimate covers all tasks which are included in the scope of services for this project.

The estimated consultant fee for the proposed project is \$455,000.

I am also attaching an invoice for \$1,050 for my services.

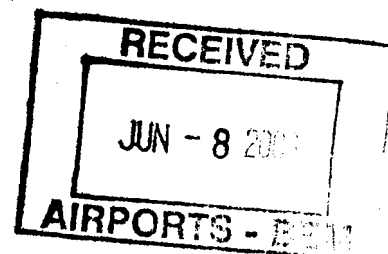
Please do not hesitate to call should you have any questions regarding my assessment.

Thank you for giving me the opportunity to prepare this estimate. If I can be of any service in the future, please let me know.

Sincerely,

*Ikars A. Cakarnis*  
Ikars (Ike) A. Cakarnis  
Airport Engineer

Attachments



June 3, 2006

**KEY WEST INTERNATIONAL AIRPORT**

**PHASE 5 CONSTRUCTION MANAGEMENT SERVICES  
IMPLEMENTATION OF NOISE INSULATION PROGRAM**

**INDEPENDENT COST ESTIMATE**

**SUMMARY OF CONSULTANT FEE ESTIMATE**

1. Project Management	<b>\$ 147,510</b>
2. Conduct Pre-Construction Tasks & Conference	<b>\$ 21,980</b>
3. Construction Period Management	
3A. Maintain Project Office & Provide Information to the Public	<b>\$ 3,420</b>
3B. Conduct Contractor Walk-Through	<b>\$ 7,580</b>
3C. Provide Construction Phase Services	<b>\$ 171,400</b>
3D. Conduct Final Inspections	<b>\$ 3,420</b>
3E. Evaluate & Close-Out Project	<b>\$ 3,420</b>
4. Conduct Post-Modification Noise Test & Prepare Final Report	<b>\$ 13,400</b>
5. Direct Costs	<b>\$ 82,870</b>
<b>TOTAL</b>	<b>\$ 455,000</b>

**1. Project Management**

	<u>Hours</u>	<u>Rate</u>	<u>Cost</u>
Director SIP (THC)	144	\$185	\$ 26,640
Project Manager	544	107	58,208
Assistant to PM	288	73	21,024
Principal Architect (MDA)	24	175	4,200
Const. Serv. Director	288	130	37,440

**TOTAL** **\$ 147,510**

**2. Conduct Pre-Construction Tasks & Conference**

Const. Service Dir. (MDA)	32	\$130	\$ 4,160
Construction Manager	36	95	3,420
Proj. Arch. (Sun Group)	80	130	10,400
Project Engineer	40	100	4,000

**TOTAL** **\$ 21,980**

**3. Construction Period Management**

**3A. Maintain Project Office & Provide Information to the Public**

Construction Mgr. (MDA)	36	\$ 95	\$ 3,420
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**TOTAL** **\$ 3,420**

**3B. Conduct Contractor Walk-Through**

Const. Service Dir. (MDA)	32	\$ 130	\$ 4,160
Construction Manager	36	95	3,420

**TOTAL** **\$ 7,580**

**3C. Provide Construction Phase Service**

	<u>Hours</u>	<u>Rate</u>	<u>Cost</u>
Constr. Mgr. (MDA)	1,640	\$ 95	\$ 155,800
Proj. Arch. (Sun Group)	120	130	15,600
<b>TOTAL</b>			<b>\$ 171,400</b>

**3D. Conduct Final Inspection**

Const. Manager (MDA)	36	\$ 95	\$ 3,420
<b>TOTAL</b>			<b>\$ 3,420</b>

**3E. Evaluate and Close-Out Project**

Const. Manager (MDA)	36	\$ 95	\$ 3,420
<b>TOTAL</b>			<b>\$ 3,420</b>

**4. Conduct Posts-Modification Noise Test &  
Prepare Final Report**

Senior Consultant (L&B)	4	\$ 205	\$ 820
Consultant	88	140	12,320
Admin. Assistant	4	65	260
<b>TOTAL</b>			<b>\$ 13,400</b>

## 5. Direct Costs

### A. Transportation

#### 1) Airline Tickets

Atlanta - Key West	6 x	\$750	\$ 4,500
Minneapolis - Key West	17x	1,200	20,400
W. Palm B. - Key West	2 x	550	1,100
Boston - Key West	2 x	750	1,500

Sub-Total \$ 27,500

#### 2) Rental Car & Rental Van

56 days x \$50/day	\$ 2,800	
3 days x \$80/day	240	
Total		\$ 3,040

**Total Transportation \$ 30,540**

### B. Lodging

46 nights x \$200/night \$ 9,200

### C. Per Diem

62 days x \$40/day \$ 2,480

### D. Housing Expense - Construction Manager

11 months x \$3,000/month \$ 33,000

### E. Office Expenses - Construction Manager

11 months x \$650/month \$ 7,150

F Noise Testing Equipment (L&B) \$ 500

**TOTAL DIRECT COSTS \$ 82,870**